

**Leon County  
Energy Conservation Measures  
June 2003**

**Attachment #1**

This report provides a summary of current and future energy conservation measures which have been and will be undertaken in Leon County. The energy conservation measures outlined in this report include energy programs implemented regarding the managing and operating of water, sewer, electric and gas utilities used in conjunction with County buildings; energy conservation measures taken in regards to fuel, oil and gas consumption for the County's fleet; preventative maintenance and replacement programs as well as a summary of future energy conservation initiatives that can continue to conserve energy and realize cost savings for the operation and management of County buildings, County fleet, equipment acquisition and maintenance.

**Current Energy Conservation Measures**

**County Buildings and Equipment**

- **City of Tallahassee - Preferred Customer Electric Service Agreement (Attachment #2)**  
This agreement was entered into between Leon County and the City of Tallahassee in November 1999. The agreement provides for electric service requirements for all Leon county facilities located within the City's service area. The agreement has a termination date of November 2009 with a provision that allows for earlier termination if notice is provided to the City by November 2006. Staff will continue to monitor the cost of electric services provided under this agreement.
- **U.S. Environmental Protection Agency "Green Lights Program (Attachment #3)**  
Leon County has been a partner in the U.S. Environmental Protection Agency (USEPA) "Green Lights" program since 1990. Our adherence to the guiding principles of this program has led to the conversion of approximately 100% of the available County building space to energy efficient lighting systems. The USEPA has further computed the net reduction in annual energy consumption costs that have been realized by these changes at a peak of \$275,000 a year, or approximately \$2,250,000 in savings over the past ten year period. Staff will continue to review and implement lighting programs that conserve energy and reduce costs.
- **U.S. Environmental Protection Agency "Energy Star" Participation**  
Leon County endorses the practice of purchasing products bearing the USEPA "Energy Star" designation. In fact, the Purchasing policy provides that all computer system purchases adhere to this designation. Staff will continue to purchase equipment with the Energy Star designation.
- **Johnson Controls "Energy Management" Program**  
Leon County presently administers a contract with Johnson Controls, Inc. (JCI), for the provision of energy management (EM) services in County buildings. These include monitoring and adjustment of heating, ventilation and air conditioning equipment; provided networked solutions for County building operations; conducting indoor air quality testing,

Report on Leon County Energy Conversation Measures  
June 2003  
Page 2

adjustment and recording, etc. These energy management services have been successful in obtaining significant gains in technology, control and record keeping as well as reductions in energy costs through-out Leon County. Annual benefits are estimated to exceed \$150,000.

- **Water Supply Changes to HVAC**  
The Cooling tower water has been revised from potable meter ( which includes sewer charge) to sprinkler meter. This change has improved the utility pricing arrangement and our estimated savings is \$40,000 annually.
- **HVAC and other equipment updates** for improved efficiency and energy conservation.

**County Fleet and Equipment**

- Centralized repair and maintenance program for all County Vehicles.
- Developed preventative maintenance program for County fleet.
- Developed and implemented a vehicle/equipment replacement policy
- Acquired a vehicle information software package
- Alternative fuels used when documented evidence exists to reflect a cost savings
- Down size vehicles when appropriate.
  1. Replaced 98% of the full size four door sedan with V/8 engines and replaced with medium size sports utility vehicles with V/6 engines.
  2. Eliminated 75% of the full size two door SUVs with V/8 engines and replaced with medium size SUVs with V/6 engines.
  3. Replaced 2 ½ ton crew trucks with one ton and 1 ½ ton units when transporting bulk material is not required on a daily basis.
- Convert to alternate fuels when document evidence exists to reflect cost savings.
  1. Replaced 98% of all gasoline powered ¾ and one ton pickup trucks with diesel engines for increased fuel economy and lower operating cost.

Report on Leon County Energy Conversation Measures  
June 2003  
Page 3

2. All 2003 Explorers are capable of utilizing ethanol as well as gasoline.
  3. Utilization of 87 octane unleaded instead of 89 and 93.
  4. Corporately purchase gasoline and diesel fuel with the City of Tallahassee.
- Tire Maintenance
    1. Utilize vendors for tire services on heavy equipment that provide the most cost effective product and the maximum refund for tire casings approximately \$50.00 per tire.
    2. Reduce field service tire repair approximately 60% on large trucks and construction equipment.
    3. Recycle tires with sufficient tread depth on large trucks and construction equipment when the units are surplusd and sold.
    4. Utilize retread tires on non-steering axles on large trucks when possible.
  - Parts and Supplies
    1. Reduced the cost of electrical, ignition, air conditioning and brake parts approximately 45%. These parts are identified as OEM, Motorcraft (Ford) and General Motors (Delco).
    2. Purchase on non-OEM radiators, heater cores and air conditioning components at warehouse prices. These parts are new and reflect a cost savings of approximately 50% below comparable items at tradition parts providers.

Report on Leon County Energy Conversation Measures  
June 2003  
Page 4

## **Future Energy Conservation Measures**

### **County Buildings and Equipment**

- Procure the services of a qualified Energy Savings Contractor (ESCO) through the DMS state contract to perform an energy audit of County buildings and make recommendations on what energy efficiency measures can be taken and provide a guaranteed cost savings and financing. Potential savings have previously been estimated to exceed \$327,000 annually.
- Review the feasibility for implementation of a Central Chiller Program for applicable County facilities. This type of program is possible for downtown buildings or campus style build-outs. The potential savings for Courthouse alone is estimated at \$100,000 annually.
- Develop a Courthouse Heat Source System. A gas source heat system is estimated to save at least \$50,000 annually. This new system would also solve the potential for accidental outside air intakes associated with current air intake locations.

### **County Fleet and Equipment**

- Downsize County Fleet and replace Mid Size SUV's and ½ Ton Pick-Ups with 1/4 Ton Pick-Ups when feasible. Estimated savings of 7,591 and \$656 respectively per vehicle.
- Limit start up to 7 minutes or less.
- Avoid excessive idling.
- Plan trips in the same geographical area. Inventory and provide all needed supplies.
- Practicc fuel conservation driving habits. Avoid wide open throttle starting process.
- Utilize high intensive strobe lighting when on the job site and poor sight distances areas.
- Continue to replace vehicles and equipment on schedule.

Report on Leon County Energy Conversation Measures  
June 2003  
Page 5

- Continue to encourage pool vehicles usage instead of permanent individual vehicle assignment.

**Employee Involvement and Office Equipment Purchases**

- All equipment purchases should have the "Energy Star" Designation when available. This includes computers, monitors, copiers, fax machines, scanners, printers, multifunction devices and other office equipment. Although these purchases may cost a little more up-front, they provide a much greater return on energy savings in the future. Equipment with the "Energy Star" designation can also greatly reduce energy through a built-in Power Management Feature which switches to low-energy mode when not in use.
- Assign responsibility fo Department Heads/Division Directors and Program managers to implement and review energy conservation measures for employees within their areas.
- Encourage employees to:
  1. Turn off lights when leaving work area;
  2. Report leaking faucets, lavatory fixtures, piping, etc.
  3. Keep windows an outside doors closed if applicable;
  4. Leave thermostats at a constant setting to avoid forcing the system to cycle off and on;
  5. Turn off all tools and portable appliances when not in use
- Assign the responsibility of turning off designated items to specific employees.
- Establish a designated telephone number where employees can report energy waste.